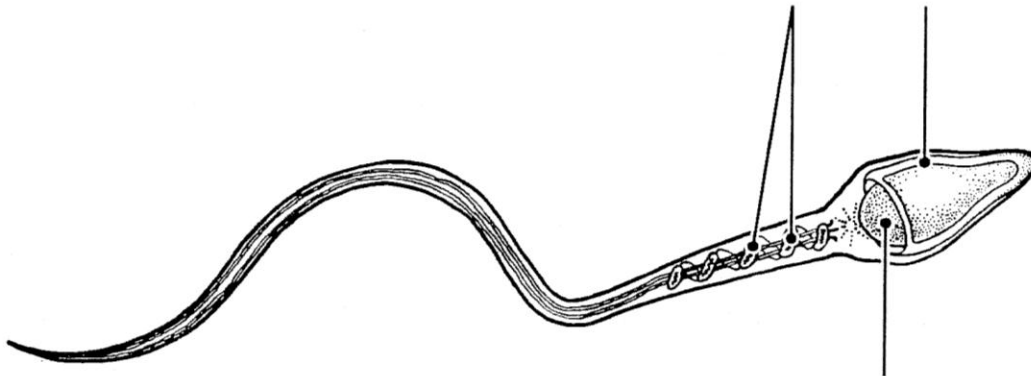


## 06 Gross Anatomy of a Sperm

7. Figure 16-4 illustrates a single sperm. On the figure, bracket and label the head and the midpiece and circle and label the tail. Select different colors for the structures that correspond to the following descriptions. Color the coding circles and corresponding structures on the figure. Then label the structures, using correct terminology.

- ★ draw on label these*
- ☐ The DNA-containing area
  - ☐ The enzyme-containing sac that aids sperm penetration of the egg
  - ☐ Metabolically active organelles that provide ATP to energize sperm movement



**Figure 16-4**

8. The following statements refer to events that occur during cellular division. Using key choices, indicate in which type of cellular division the described events occur. Place the correct term or letter response in the answer blanks.

### Key Choices

- A. Mitosis                      B. Meiosis                      C. Both mitosis and meiosis

- \_\_\_\_\_ 1. Final product is two daughter cells, each with 46 chromosomes
- \_\_\_\_\_ 2. Final product is four daughter cells, each with 23 chromosomes
- \_\_\_\_\_ 3. Involves the phases prophase, metaphase, anaphase, and telophase
- \_\_\_\_\_ 4. Occurs in all body tissues
- \_\_\_\_\_ 5. Occurs only in the gonads
- \_\_\_\_\_ 6. Increases the cell number for growth and repair
- \_\_\_\_\_ 7. Daughter cells have the same number and types of chromosomes as the mother cell

(Continued on the next page)